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## STIMULATING ONLINE BUYING BEHAVIOUR AMONG MILLENNIALS IN PAKISTAN: A CONCEPTUAL MODEL AND RESEARCH PROPOSITIONS

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### Abstract

Many e-retailers are utilising the influence of situational variables to impact consumer buying behaviour. Despite online buying behaviour of consumers, especially under the stimulants of sales promotion and scarcity are commonly practiced in developed countries, dearths of scholarly research both conceptual and empirical studies have been observed in developing countries like Pakistan. This study conceptualises the existing framework based on extensive literature review and proposes a quantitative research design for data collection in future. This paper brings forth the conceptual model to fill the gap of theoretical knowledge by delineating the influence of the purchase factors especially on the specific generation's cohort i.e. Millennials and provides an explanation of their effects through consumer internal evaluation i.e. anticipated regret. Finally, the authors discuss both theoretical and managerial implications and offer guidelines of future empirical research.

### Research paper

**Keywords:** E-commerce, Sales Promotion, Scarcity, Anticipated Regret, Stimulus Organism Response Model, Online Buying Behaviour, Millennials

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## **Introduction**

The emergence of e-commerce has completely altered the retail landscape for both consumers and retailers (Kush and Petzer, 2018). The world in the last decade has seen an incredible growth of online shopping in comparison to traditional buying method i.e. brick and mortar. According to an estimate it has been stated that global sales of retail e-commerce have risen from \$695bn to \$840bn in 2014. Similarly, e-commerce sales of the world will grow to the US \$3.453 trillion in 2019 with an increase of 21% from previous year (Statista, 2018) and projected to reach \$4.1 trillion in 2020 (Kearney, 2015). This implausible growth in e-commerce owes to the features that internet brings to consumers i.e. buying convenience, personalized promotional offers, privacy, and security, etc. However, the doubts regarding online shopping in the minds of consumer in its inception phase has been overpowered by the benefits it brings to consumers (Vasic et al., 2019).

Researchers have also posited that e-commerce growth has shown great potential in emerging markets in Asia-Pacific than in developed countries (Kuhn and Petzer, 2018) particularly in the Indian sub-continent (Iqbal, 2012). This oozing potential in Asia-Pacific can be attributed to several benefits such as changing lifestyles of consumers, increasing penetration in information and communication technology (Narang and Trivedi, 2016; Deshpande et al., 2014). According to a report by PricewaterhouseCoopers (2015) which revealed that 90 percent of consumers in Asia will either

browse or purchase online which is significantly more than the consumers in western world i.e. 80%. Most of the extant research proves that online buying behaviour has been the epicentre of research in developed countries (Gao and Li, 2019; Wu et al., 2013) whereas it has received very scant attention from academic scholars towards developing countries (Aldousari et al., 2016; Akhlaq and Ahmed, 2015; Kshteri, 2007) such as Pakistan. There is a sufficient gap available in the extant literature pertaining to online consumers' buying behaviour and their buying inclinations in emerging countries (Prashar et al., 2015).

Scholars still perceive online buying behaviour in Pakistan at an introductory stage and regard it as the new way of shopping for consumers in Pakistan (Kouser et al., 2018; Saqib et al., 2016). According to the United Nations Human Development Report (2018) out of 207 million total population of Pakistan, 64 % of people are under the age of '30s, making Pakistan the second youngest country after Afghanistan. Pakistan currently has 60 million subscribers of 3G/4G (PTA, 2018) which are higher than the entire population of Canada. Moreover, State Bank of Pakistan (SBP) also revealed that online buying websites (e-commerce merchants) have increased 2.6 times from 344 to 914 (Dawn, 2018b). However, despite all positives, Pakistan current e-commerce statistics are in dismal position. Pakistan's retail and wholesale trade component of Gross Domestic Product (GDP) is about \$20.54 billion which is ten times less than the sales revenue of a single e-retailer Amazon (\$232 billion; Statista, 2019). Furthermore, Pakistan was classified at 57<sup>th</sup> position out of 60 members in regard to e-readiness

owing to several factors such as internet availability, lack of infrastructure and e-commerce policy.

Although, retail e-commerce in Pakistan has not been as successful as compared to other countries such as United States, United Kingdom, and China but lately trend of online buying behaviour has been observed significantly due to sales promotional deals on festivals and carnivals in Pakistan such as Black Friday (Dawn, 2016). Moreover, the stimulating factor of sales promotion and scarcity has remained successful in generating a buying behaviour culture that was reported by the country manager of one of the main e-commerce websites Kamyu.pk, that their sales rose 30% especially in the days of festivals owing to sales promotion. For a long time in an academic world, consumer promotions as central marketing means have remained to be the gist of the research among researchers. More emphasis has been laid lately to gauge consumers' responses to promotional campaigns by investigating the influence of scarcity related cues such as time restrictions and discount size (Swain et al., 2006). Similarly, to stay afloat in the competitive environment, companies or retailers' online resort to various persuasion strategies such as the use of scarcity cues so as to retain their consumers on their website and stimulate them to complete the transaction (Jang et al., 2015).

However, very little information is currently available on Pakistani consumers, particularly about their online shopping behaviour (Kouser et al., 2018; Rahman et al., 2018; Saqib et al., 2016; Akhlaq and Ahmed, 2015). Previous studies within the context have neglected the element of

consumers emotion i.e. anticipated regret and focused on offline buying behaviour (Awan et al., 2015; ur Rehman et al., 2011; Akhlaq and Ahmed, 2016). According to a study which investigated the effects of advertisement on consumer's buying behaviour with references to fast moving goods in one of the main provinces in Pakistan and in that research model researches focused on direct relationship between the drivers of consumer buying behaviour, hence, neglecting the need to ponder on consumer emotional aspect. Furthermore, in another study by Nasir et al. (2012) which laid their emphasis on the drivers of consumer buying behaviour without paying considered attention to consumer emotional aspect. More recently Waheed and Yang (2018) studied the impact of mobile marketing on Pakistan consumer buying behaviour. In their research model researchers also neglected to focus and highlight the key element in consumer buying decision i.e. consumer emotions. Therefore, the research model used in this research gives us a holistic inside of consumer online buying behaviour especially focusing on the very limited research domain in consumer buying behaviour i.e. anticipated regret.

To tap the rising and growing online market of Pakistan and (Rahman et al., 2018) cater the dearth of knowledge in this regard both practitioners and academicians need to understand Pakistani consumers' buying behaviour, resultantly, this will advance the macro-economic situation of Pakistan (Majeed and Ayub, 2018) and increase the e-retailers' profits (Mzahar et al., 2012). In this article, we investigate how sales promotion and scarcity impact consumers online buying behaviour through anticipated

regret. We build a conceptual framework (figure 1) based on Mehrabian and Russell (1974) S-O-R model and try to answer the following research questions:

**RQ1:** *Is there a relationship between sales promotion and scarcity with anticipated regret?*

**RQ2:** *Does anticipated regret effect consumer online buying behaviour?*

**RQ3:** *Does anticipated regret mediated between sales promotion, scarcity and online buying behaviour of millennials in Pakistan?*

This study is likely to contribute to the existing studies as follows. First, there has been very little published empirical and non-empirical research investigating stimulating situational factors such as sales promotion and scarcity and the strategic use of anticipated regret as a strong emotion, which can drive Pakistani consumers to shop online. This dearth of knowledge leads to non-inclusive results which have motivated the researcher to augment the understanding of online shopping behaviour in Pakistan. Second, in spite of the fact researchers have been concentrating on consumers' post-purchase regret and have neglected the strategic use of pre-purchase regret as anticipated regret in studies, especially stimulated by the situational variables such as sales promotion and scarcity. However, marketers now a days are trying to investigate the consumer emotions with understandings into consumer black box to serve the purpose of captivating consumer hearts (Soodan and Pandey, 2016) and to forecast the success of sales promotion, scarcity and anticipated regret to increase consumer intention on purchasing decisions. This study will be introducing a new sequential proc-

ess in S-O-R model where the elements of situational variables (sales promotion and scarcity) affecting and augmenting the online buying behaviour of Pakistan consumers by emphasizing on pre-purchase regret i.e. anticipated regret and its mediating effect between scarcity, sales promotion, and online buying behaviour. The model theorized in this paper will deem more comprehensive in the pursuit of explaining the affective state (anticipated regret) triggered by the two situational constructs (sales promotion and scarcity) used in this study and the consequent behaviour (online buying behaviour) of consumers during the online shopping (Buxbaum, 2016; Mehrabian and Russell, 1974).

Furthermore, given the plethora of choices available for online consumers, similarly, competition among e-retailers for consumers is getting severe and will only become more forceful in upcoming years. To encourage consumers to buy purchase products and services online, online marketers and retailers should implement the conceptual model presented in this study by emphasizing consumers' needs and wants to trigger the impact of situational variables and targeting their emotions. There is no doubt that e-retailers should endlessly produce valuable insights about how best to use the influence of situational variables such sales promotion and resources related to it to make it more effective in their marketing campaigns. Such resources may also be invested to integrate new features intended at increasing the website design and website quality. These measures should be taken with an aim to enrich consumers' online shopping experiences to acquire new and profoundly engaging consumers. As a result, e-retailers, marketers,

195

and practitioners will not only be able to develop websites that match consumers' needs but also to design and create effective online marketing and selling strategies to gain a competitive advantage and foster the deteriorating economic situation of Pakistan (Mehtar, 2017). On the other hand, inappropriate application of sales promotions can also lead to a decrease in the possibility of a brand and product being chosen (Radovic Markovic and Salamzadeh, 2012). Thus, the proposed conceptual model in this study will provide a better understating of stimulating factors that significantly influence consumers' online buying behaviour in the context of a developing country like Pakistan. Understanding such factors that can stimulate consumers online may offer new insights, subsequently, leads to the growth of B2C e-commerce especially in the context of Pakistan (Rahman et al., 2018). Pakistan currently is facing grave macro-economic situation which is hampering the growth of Pakistan (Mehtar, 2017).

Moreover, the proliferation of social media which now becoming a significant tool for e-retailers to communicate with their potential consumers, implementation of this conceptual model will prepare marketing managers with supplementary understandings about how several modes electronic communication differentially affects consumers perception of sales promotion, scarcity, their anticipated regret, and online buying behaviour. Future empirical implementation of this model will reveal how e-retailers can leverage the impact of the situational variables used in this study in initiating the consumer regret and subsequently generating their buying behaviour. Moreover, results of future empirical studies will also reveal the strate-



gic use of consumer emotion in their strategies to generate a response from consumer.

We structure the rest of the article by illustrating the detail theoretical background of S-O-R model, Regret theory, online buying behaviour and anticipated regret. Followed by conceptual framework and four propositions to investigate the effects of sales promotion, scarcity, anticipated regret on online buying behaviour.

## **Literature Review**

In this section as a theoretical background of this study, two essential theories: The Stimulus Organism and Response model and Regret theory will be discussed. Drawn on these theoretical underpinning theories this paper's conceptual framework (Figure 1) will be reviewed along with propositions.

### ***Stimulus Organism Response Model***

Emanating from psychological perspectives, the model presented by Mehrabian and Russell (1974) contains three main sections: stimulus, organism, and response, hence it is commonly known as the S-O-R Model. According to Donovan and Rositer (1982) and Mehrabian and Russell (1974), these components are sequential in nature explaining how a stimulus from an environment can initiate and trigger both cognitive and emotional states of an individual, resultantly, generating an approach or avoidance behaviour. The S-O-R model is extensively extended not only in the context of

both planned (Wu et al., 2017) and unplanned (Chen and Yao, 2018) online buying behaviours of consumers but also in the field of organisational behaviour and information system (Tang et al., 2019; Chan et al., 2017; Attiq et al., 2017). This preferential use of the S-O-R model in consumer behaviour related online shopping studies is solely due to the rise of e-commerce to further advance the understanding of consumers' both cognitive and emotive responses and their ultimate behavioural decisions (Lee and Lee, 2019; Kuhn and Petzer, 2018).

Prior studies pertaining to online shopping using S-O-R model has used various variables as stimuli, e.g. aesthetics of online store (Lee and Lee, 2019), visual appeal and perceived usability (Kuhn and Petzer, 2018), website quality (Dashti et al., 2019; Chang et al., 2019; Javerdi et al., 2019), website brand (Chang et al., 2019; Hsin Chang and Wen Chen, 2008); sales promotion (Chen and Yao, 2018; Xu and Huang, 2014) scarcity (Friedrich and Figl, 2018). Some of the variables used in organism section of S-O-R model were attitude (Wu et al., 2018; Peng and Kim, 2014), trust (Jeon et al., 2017), flow (Kuhn and Petzer, 2018; Kim et al., 2019) whereas online purchase behaviour (Nawi et al., 2019), online purchase intention (Huang et al., 2017; Hsu et al., 2016) are used as a response by consumers.

Earlier research on consumer online buying behaviour using S-O-R model has mainly focused on cognitive and affective emotions such as trust, attitude, positive effect, risk and perceived value and have always measured consumer buying intention (Tankovic and Benazic, 2018; Wu et al., 2017; Kuhn and Petzer, 2018; Nawi et al., 2019). Very seldom any studies have

actually tested actual buying behaviour particularly of millennials in developing country like Pakistan. Similarly, most prior research related to online buying has been about the reduction of post-purchase regret. In particular, limited research has focused on anticipated regret as an emotion at a pre-purchase stage and failed to gauge its impact to improve the emotional state of a consumer and determine consumers respond to retailers by improving and enhancing their emotions. Similarly, unlike prior research model on consumer buying behaviour, this research model conceptualises both an anticipatory element of regret and also cater the actual buying behaviour of Pakistani consumers. Moreover, prior models in extant literature have mostly focused on technology/website related stimuli to investigate consumer buying behaviour such as Gao and Li (2019) has used IS success model along with social presence, telepresence and website identification to gauge consumer purchase intention. Similarly, Akram et al. (2018) used website quality as second order to measure its impact on consumer unplanned buying behaviour with sales promotion and credit card as moderator. Therefore, pertaining to the gap in theoretical knowledge especially from the lens of situational variables i.e. sales promotion and scarcity, the current study contributes to the existing literature on B2C e-commerce by adopting the S-O-R model to investigate the relationship of anticipated regret (organism) between the sales promotion and scarcity (stimuli) and their online buying behaviour (response).

### ***Regret Theory***

Lately, a lot of attention from the academic world is paid to the emotional aspect of consumer decisional making and it is regarded as the shifting of a trend where all the previous research was heavily relying on cognitive factors (Gupta and Gentry, 2019). The genesis of regret theory dates back to 1982 when Bell, Loomes, and Sugden introduced the element of anticipatory regret in their decisional model and called it regret theory. This theory states that an individual encounter regret when the consequence of the forgone substitute would have been better and vice versa (Diecidue and Somasundaram, 2017; ven de Ven and Zeelenberg, 2015; Zeelanberg, 1999). Therefore, individuals during the process of decision making especially pertaining to consumption will try to avoid facing regret (Khan et al., 2019) and will make headways for scenarios which can bring joy etc, hence, regret theory is also known as theory of regret aversion (Verjikijika, 2018).

### ***Online Buying Behaviour***

Owing to the rise in e-commerce all around the world, online buying behaviour has been the focus of the research by many scholars especially in marketing an information system (Chang et al., 2019; Hamid et al., 2019; Tankovic and Benazic, 2018; Nejati et al., 2011). Online buying behaviour is the representation of consumers' psychological state (Monuwe et al., 2004). It is defined as the process of purchasing products or services with the help of internet (Hamid et al., 2019, Waheed and Young, 2018). Prior

research has used several factors such as website quality (Tariq et al., 2019; Gao and Li, 2019), e-servicescape (Tankovic and Benazic, 2018), sales promotion (Akram et al., 2018; Chen et al., 2018), website brand (Chang et al., 2018; Chang and Chen, 2008) to generate consumer online buying behaviour. Similarly, socio-demographics are most commonly discussed factors that can influence online consumers (Hamid et al., 2019).

### ***Anticipated regret***

Anticipated regret is the imagination and expectation of future regret whilst making decisions (Wong & Kwong, 2007; Zeelenberg & Pieters, 1999). It is the tendency of human nature that humans tend to avoid getting succumb to situations where they have to face regret. Therefore, anticipation of regret is also known as a perspective, aversive and cognitive emotion (Koch, 2014). The inception of anticipated regret idea relates to the origins of regret theory and it has been widely applied as a significant driver of behaviour from the perspective of theory of planned behaviour (TPB; Brown et al., 2019; Sandberg et al., 2016; Moghadam and Salamzadeh, 2018). Scholars from various field has been using it in various domains, such as marketing (Sarangee et al., 2019; Polites et al., 2018; Sandberg et al., 2016) computer security (Verkijika, 2018), economics (Skelton and Allwood, 2017) and road safety (Brown et al., 2019). As an emotion, anticipated regret is considered as a very strong emotion that most individuals would like

to avoid, this avoidance can stimulate or influence certain behaviour among consumers (Li et al., 2010).

## **Proposition development**

### ***Sales Promotion and Anticipated Regret***

Sales promotion has been extensively used in the marketing studies by previous researches to investigate its impact on consumer buying behaviour and its importance both in the eyes of consumers and the e-retailers is increasing globally (Chen and Yao, 2018; Akram et al., 2018; Badgaiyan and Verma, 2015; Tajpour and Salamzadeh, 2019). All around the world a significant proportion of the marketing budget is spent on sales promotion (Iranmanesh et al., 2017). It is defined as combination of various tools proposed to stimulate consumer to purchase a particular brand within time-bound environment (Badgaiyan and Verma, 2015; Kotler and Armstrong, 2012). It is considered as an important element which weakens the self-control and induces desires in consumer generating both rational and irrational buying behaviour of consumers (Akram et al., 2018; Lo et al., 2016). Published empirical literature has established that both unexpected promotions and the strategic use scarcity cues induce a rush in consumers subsequently creating an urge to buy.

Moreover, in an online shopping environment, consumers encounter promotional deals time and again such as discounted prices or bonus packs, both these monetary and non-monetary promotions leave a great impact on

consumers. Swain et al. (2006) investigated the impact of sales promotion (discounts) and how it affects consumers' both economic and emotional outcomes. Their study concluded that in the midst of promotions offers consumers' evaluation of anticipated regret increases which in turn increases consumers' urgency to purchase. The study suggests that during discounts, favorable deal evaluations lead to greater anticipated regret which further heightens a consumer's sense of urgency. They concluded that promotional offers in the shape of discounted deals as a stimulus positively affect consumers' emotional outcomes such as anticipated regret. Similarly, results were achieved by Zhou and Gu (2015). Therefore, this study proposes the following proposition:

**P<sub>1</sub>:** *Sales promotion has a positive effect on consumers' anticipated regret.*

### ***Scarcity and Anticipated Regret***

Scarcity is referred to as a condition in which the commodities become less available. According to Aggarwal et al. (2011) scarcity creates an urgency among consumers subsequently generating higher sales and more satisfaction among consumers. Moreover, scarcity can be illustrated as a communicating technique employed by managers by restricting either the quantity or putting a time constraint on products or services, resultantly, augmenting the appeal of the commodities (Chen and Yao, 2018). Prior studies have posited two types of scarcity messages which are widely used the e-retailers': limited quantity and limited time (Friedrich & Figl, 2018;

Jang et al., 2015; Aggarwal et al., 2011). These scarcity related messages are hailed as very important from the perspective of economic theory as it is known to create an unbalance between supply and demand (Akram et al., 2018a). Similarly, in coupons, due to their time-bound usage portrays the same role of scarcity, resultantly leaves a significant influence on consumer buying behaviour (Sik and Hwan, 2014). Several e-retailers' employs the scarcity associated messages creating psychological pressure on consumers (Akram et al., 2018a) and makes most of human's loss aversion (Kahneman and Tversky 2013)

According to research, it has been established that scarcity enhances the anticipation of regret in case of missing an opportunity to buy (Coulter and Roggeveen, 2012). Similarly, Inman and McAlister (1994) conducted a study in which it was concluded that scarcity evokes a regret in consumer, subsequently, enhances the purchase intention among consumers. Similar results were achieved from Du et al. (2006) study that the more the scarce a product the more the regret will be induced by the consumer which further will generate an intention to acquire such product. Lately, Gupta and Gentry (2019) also investigated the role of anticipated regret in creating an urgency to buy among the fashion industry and concluded that anticipated regret positively affects the consumer buying decision. Therefore, based on the above discussion this study proposes the following proposition:

**P<sub>2</sub>:** *Scarcity has a positive effect on consumer's anticipated regret.*



### ***Anticipated Regret and Online Buying Behaviour***

Published empirical studies have already demonstrated that anticipated regret predicts and drives intention and behaviour (Brown et al., 2019; Sandberg et al., 2016). Research has stated that anticipated regret, not online effects planned rational buying behaviour, its significance is also felt on irrational unplanned buying behaviour by creating an urgency to buy (Gupta and Gentry, 2019; Zhou and Gu, 2015). Quite a few studies have recognized that anticipated regret amid consumers leads to such selections which are benign, therefore representing risk averse behaviour (Li et al., 2010). Moreover, Khan et al. (2019) demonstrate in their empirical study that anticipated regret under the stimulating scarcity related factor, affects consumer decision making, therefore, the strategic use of anticipatory emotions of consumers in the shape of anticipated regret will become the driver for creating the desired response from behaviour.

Furthermore, prior research has also proven empirically that the element of anticipated regret not only effects indirectly it also mediates the relationship between the situational variable called scarcity and consumer unplanned buying behaviour (Gupta Gentry, 2019; Zhou and Gu, 2015). A study on bidding auction by Du et al. (2006) also proves the mediating relation of scarcity on consumer bidding process. The authors conclude consumer anticipated regret increase when they perceive a product is scarce. This antiparty emotion is generated by the fear of missing out a bargain subsequently becomes a stimulant for consumer to alter their decision-making

process. Therefore, e-retailers by introducing the element of scarcity in their businesses can entice consumers' urgency to purchase online. Hence, based on the following arguments, this study proposes the following proposition:

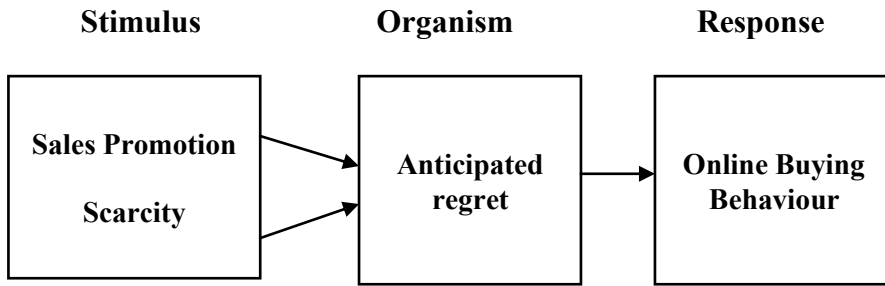
**P<sub>3</sub>:** *Anticipated regret has a positive effect on consumer online buying behaviour.*

**P<sub>4</sub>:** *Anticipated regret mediates the relationship between sales promotion, scarcity, and consumer online buying behaviour.*

## **Guidelines for empirical testing in future**

### ***Measurement Issue***

To statistically validate our conceptual model, suitable measures for the constructs used in the study must be established and purified. In this regard Table, 1 presents the various constructs in the current framework and strategies for their measurement. These measures are suggested as potential starting point for further detailed empirical investigation related to this domain. Furthermore, to cater the remedy of common method variance, the author proposes use of both procedural and statistical measures (Podsakoff et al., 2003). In regard to statistical measures particularly, the author suggests the use of a marker variable technique to lessen the common method bias in the future study. The use of marker variable was initially suggested by Lindell and Whitney (2001).



**Figure 1.** Conceptual framework

### ***Unit of analysis***

Millennials, who have made a purchase online in past six months, will be proposed as the unit of analysis for future detailed study. According to Pew Research studies, millennials are group people who are born between 1981-1997 (ATKearney.co.uk). According to Pakistan Bureau of Statistics (PBS; 2018) total population of Pakistan is 207 million out of which is it is estimated that more than 56 million people are under the category of Millennials. Furthermore, United Nations Human Development Report (2018) stated that more than 64% of Pakistan's total population is below the age of 30. Therefore, pertaining to rise of millennials in Pakistan particularly and their annual purchasing power in general worldwide has remained the main reason why millennials are suggested as the generational cohort for future study.

**Table 1.** Variables, definition and illustrative measures

<b>Variables</b>	<b>Definition</b>	<b>Measurement Items</b>	<b>Source</b>
<b>Sales Promotion</b>	Sales promotion relates to rouse consumers' needs and desires to purchase instantly from a specific brand (Akram et al., 2018).	<ul style="list-style-type: none"> <li>• If I see a discounted price, I tend to buy it.</li> <li>• If I see an interesting online promotional offer (reduced price, sales, etc), I tend to buy.</li> <li>• I am likely to make a purchase if the product has a sale or clearance sign.</li> </ul>	Akram et al. (2018).
<b>Scarcity</b>	A technique of communicating messages to customers by restricting the item's amount and/or time of accessibility, which raises the worth and attractiveness of that product or service (Chun and Yao, 2018).	<ul style="list-style-type: none"> <li>• I am worried about limited time.</li> <li>• I am concerned about the limited quantity.</li> <li>• I become anxious when I see a "sold out" sign.</li> <li>• I feel that the limited edition of a product will cause many people to buy.</li> <li>• I think that the current supply of a limited product is small.</li> </ul>	Chen and Yao (2018).

<b>Variables</b>	<b>Definition</b>	<b>Measurement Items</b>	<b>Source</b>
<b>Anticipated Regret</b>	Anticipated regret is an emotion that takes place after a comparison made among real results and what would have happened if a different choice was made (Gupta and Gentry, 2019).	<ul style="list-style-type: none"> <li>• While shopping on website X I feel like I would experience regret if I waited and ended up without the desired product.</li> <li>• I would be upset if I missed buying some products of interest on website X.</li> <li>• I feel like If I missed buying the product of interest right way on website X, I would regret it later.</li> </ul>	Gupta and Gentry (2019).
<b>Online Buying Behaviour</b>	It narrates to actual buying behaviour (online products, personal purchase, variety of websites) in the past six months (Chopdar et al., 2018).	<ul style="list-style-type: none"> <li>• In the past six months, I have used the website X to purchase online products.</li> <li>• In the past six months, I have used online websites to shop for products from different online retailers.</li> <li>• In the past six months, I have used the website X to make personal purchases.</li> <li>• I have used different kinds of online websites in the last six months.</li> </ul>	Chopdar et al. (2018).

### ***Statistical data analysis***

To fulfil the main objectives of the research, partial least squares (PLS-SEM) is appropriate since it is suitable for identifying the key driver constructs and the structural model, which is complex (Hair et al. 2019). Following Hair et al. (2019) recommendation, the model of the study should be tested in two steps. In first step, the measurement model will be evaluated to establish the validity and reliability of the questionnaire. Later, in the second step, the hypotheses of the study should be tested using bootstrapping technique. Moreover, for mediation analysis the author recommends Hayes (2009) and Preacher and Hayes (2008) estimation of the mediation effect for SEM with the bootstrap test which is considered more suitable than the concept of Baron and Kenny (1986) about mediation. Hayes (2009) and Preacher and Hayes (2008) exposed that the mediation effect considers significant while the indirect effect between independent and dependent variables come out significant.

### **Conclusion**

In summary, online buying behaviour has received far more attention in developed countries in comparison to developing countries. The use of situational variables to generate a buying response is very common in Asia Pacific and is commonly prevalent in the market. This study has conceptualized the strategic use of consumer emotion in the shape of their anticipated regret in generating positive consumer buying behaviour. In this

context, a conceptual model is proposed which yields both theoretical and practical benefits from the lens of underlying theories i.e. S-O-R model and regret theory.

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